

## Water-Data Report 2008

**01381330 WHIPPANY RIVER AT WHITEHEAD ROAD, AT WASHINGTON VALLEY, NJ**

PASSAIC RIVER BASIN

LOCATION.--Lat 40°47'48", long 74°31'48" referenced to North American Datum of 1983, Morris Township, Morris County, NJ, Hydrologic Unit 02030103, at bridge on Whitehead Road, 0.6 mi south of Washington Valley, 2.5 mi west of Morristown, and 3.6 mi upstream of Speedwell Lake.

DRAINAGE AREA.--8.91 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 2007-08.

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 6.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, suspended residue, ammonia-plus-organic nitrogen in bed sediment, and phosphorus in bed sediment were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	Time	Turbidity white light, det ang 90+/-30 corrctd	UV absorb- ance, 254 nm, wat flt units	UV absorb- ance, 280 nm, wat flt units	Baro- metric pres- sure, mm Hg	Dis- solved oxygen, mg/L (00025)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, μS/cm (00095)	Temper- ature, wat unf air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)
Nov 20...	0840	1.3	.074	.058	758	10.7	83	7.4	774	4.5	4.6	130	31.6
Feb 28...	0830	1.6	.042	.031	756	11.8	83	7.4	319	-5.0	.9	67	16.6
Jun 10...	0730	4.7	.061	.049	751	6.8	76	7.5	301	26.0	20.7	91	22.3
Aug 19...	0800	2.2	.049	.039	753	7.4	79	7.7	316	23.0	18.6	100	25.3

## 01381330 WHIPPANY RIVER AT WHITEHEAD ROAD, AT WASHINGTON VALLEY, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	ANC, wat unf fixed end pt,						Chlor- ide, water, filtrd,	Fluor- ide, water, filtrd,	Silica, water, filtrd,	Sulfate mg/L as SiO2	Residue water, filtrd, sum of constitu- tuents	Residue on evap.	Residue at 180degC	Ammonia	
	Magnes- ium, water, filtrd, mg/L (00925)	Potas- sium, water, filtrd, mg/L (00935)	Sodium, water, filtrd, mg/L (00930)	lab, mg/L as CaCO3	(90410)	(00940)								org-N, water, filtrd, mg/L (00623)	Ammonia water, filtrd, mg/L (00608)
Nov 20...	11.7	2.15	94.3	55	190	<.12	18.4	14.5	E400	420	1	.15	.027		
Feb 28...	6.24	1.22	29.9	35	61.0	<.12	14.3	11.6	E166	179	1	.16	.011		
Jun 10...	8.52	1.64	18.7	54	46.7	<.12	20.0	11.7	166	216	8	.20	.031		
Aug 19...	9.86	1.62	18.1	59	48.8	E.07	18.3	12.3	E174	214	2	.14	.019		

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	Nitrate + nitrite water filtrd, mg/L as N (00631)	Partic- ulate nitro- gen, water, filtrd, mg/L (49570)	Total nitro- gen, water, unfiltrd mg/L (00602)	Total nitro- gen, water, unfiltrd mg/L (00600)	Ortho- phosphate, water, filtrd, mg/L as P (00671)	Phos- phorus, water, filtrd, mg/L as P (00666)	Phos- phorus, water, unfiltrd, mg/L as P (00665)	Total carbon, suspd sediment mg/L (00694)	Inor- ganic carbon, suspd sediment mg/L (00688)	Organic carbon, suspd sediment mg/L (00689)	Organic carbon, water, filtrd, mg/L (00681)	Arsenic water, filtrd, μg/L (01000)	Arsenic water, unfiltrd μg/L (01002)	
Nov 20...	.87	<.04	1.0	--	E.008	.009	.014	E.1	<.04	.1	1.9	--	--	
Feb 28...	1.02	E.02	1.2	E1.2	E.005	E.005	.011	.3	<.04	.3	1.6	.13	<.60	
Jun 10...	.96	E.04	1.2	E1.2	.012	.017	.032	.6	<.04	.6	1.9	--	--	
Aug 19...	1.02	E.03	1.2	E1.2	.013	.012	.021	.3	<.04	.3	1.6	.22	<.60	

## 01381330 WHIPPANY RIVER AT WHITEHEAD ROAD, AT WASHINGTON VALLEY, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	Barium, water, unfltrd recover -able, μg/L (01007)	Beryll- ium, water, unfltrd recover -able, μg/L (01012)	Boron, water, unfltrd recover -able, μg/L (01020)	Boron, water, unfltrd recover -able, μg/L (01022)	Cadmium water, unfltrd recover -able, μg/L (01027)	Chrom- ium, water, unfltrd recover -able, μg/L (01034)	Copper, water, unfltrd recover -able, μg/L (01042)	Iron, water, unfltrd recover -able, μg/L (01045)	Lead, water, unfltrd recover -able, μg/L (01051)	Mangan- ese, water, unfltrd recover -able, μg/L (01055)	Mercury water, unfltrd recover -able, μg/L (71900)	Nickel, water, unfltrd recover -able, μg/L (01067)	Selen- ium, water, unfltrd recover -able, μg/L (01147)
Nov 20...	--	--	21	--	--	--	--	--	--	--	--	--	--
Feb 28...	27.0	<.04	14	13	.02	E.26	E.92	194	.20	23.7	<.010	.38	.15
Jun 10...	--	--	22	--	--	--	--	--	--	--	--	--	--
Aug 19...	28.8	<.04	20	21	<.01	<.40	1.9	294	.23	31.8	<.010	.39	.14

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007**  
**TO SEPTEMBER 2008**

Part 5 of 5

[Remark codes: <, less than;  
E, estimated.]

Date	Silver, water, unfltrd recover -able, μg/L (01077)	Zinc, water, unfltrd recover -able, μg/L (01092)
Nov 20...	--	--
Feb 28...	<.02	3.5
Jun 10...	--	--
Aug 19...	<.02	E1.3

**01381330 WHIPPANY RIVER AT WHITEHEAD ROAD, AT WASHINGTON VALLEY, NJ—Continued**

## **WATER-QUALITY DATA**

### **WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	Ammonia		Phos- phorus,		Inor- ganic		Chrom-		Cobalt bed	Copper, bed	Iron, bed	Lead, bed
		pH bed	+ org-N, bed	bed	bed	carbon, sedimnt	carbon, bed	bed	bed	ium, bed	bed	sedimnt	sedimnt
		bed	bed	sedimnt	total, std	mg/kg	total, mg/kg	total, sedimnt	total, sedimnt	recover	recover	recover	recover
		(70310)	(00626)	(00668)	(00693)	(00686)	(64847)	(01028)	(01029)	(01038)	(01043)	(011170)	(01052)
Aug 19...	0830	6.98	240	1,900	5.4	<2	1.2	.080	7.7	3.1	8	9,900	6.7

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 4

[Remark codes: <, less than; E, estimated.]

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 4

[Remark codes: < less than; E estimated]

[Formaldehyde sources: <, > 1000 t/yr; E, estimated.]													
	2-Methyl-anthra-cene, bed sed	4H-Cyclophenan-threne, bed sed	9H-Fluorothrene, <2 mm, bs <2mm	Ace-naphthene, bed sed	Ace-naphthylene, bed sed	Anthra-cene, <2 mm, wsv nat	Benzene, bed sed	Chrysene, bed sed	Dibenzanthracene, bed sed				
Date	ug/kg (49435)	ug/kg (49411)	ug/kg (49399)	ug/kg (49429)	ug/kg (49428)	ug/kg (49434)	ug/kg (49436)	ug/kg (49389)	ug/kg (49458)	ug/kg (49408)	ug/kg (49397)	ug/kg (49450)	ug/kg (49461)
Aug 19..	110	200	73	E38	120	250	640	640	850	E230	330	700	<50

## 01381330 WHIPPANY RIVER AT WHITEHEAD ROAD, AT WASHINGTON VALLEY, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Fluor-anthene <2 mm wsv nat field, ug/kg (49466)	Indeno-[1,2,- 3-cd]- bed sed bed sed wsv nat bed sed ug/kg (49390)	Iso-phorone bed sed <2 mm, wsv nat field, ug/kg (49400)	Naphth-alene, bed sed <2 mm wsv nat field, ug/kg (49402)	p-Cresol, PCBs, bed sed ug/kg (39519)	Phenan-threne, bed sed <2 mm, wsv nat sedimnt ug/kg (49451)	Phenan-threne, bed sed <2 mm, wsv nat field, ug/kg (49409)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49393)	Bed sediment, dry svd sve dia percent <62.5um (80164)	
Aug 19...	1,300	E220	<50	E14	103	E6	670	E19	1,300	14